

October 3, 2012

Adam Horst
Director, State Budget Agency
212 State House, 200 W. Washington Street
Indianapolis, IN 46204

Dear Mr. Horst:

As any first responder will testify, success is measured in lives saved and property protected during both day-to-day and emergency operations. For the Integrated Public Safety Commission (IPSC), the day-to-day success is illustrated by the sheer numbers of agencies and first responders using the statewide 800 MHz network each and every day. And while it seems almost cruel to label any disaster such as the spring E4 tornado outbreak in southern Indiana in March 2012 a success, the event served up a "perfect storm" of tests to measure our progress towards furthering statewide interoperable communications, answering questions such as,

- How resilient are the communications sites in the statewide network?
- How well will the system function when overloaded?
- How quickly can the agency mobilize staff and equipment to support response and recovery?
- Do the plans and policies that are in place facilitate response?
- Are responders sufficiently trained on system use and interoperable communications principles in general?
- And, most of all, what do we, as an agency, need to do to ensure that first responders are even better equipped, trained and able to communicate during the next disaster?¹

The answers to these, and other questions form the basis for this summary of the Integrated Public Safety Commission's mission, goals, and finances for FY2013. We appreciate the opportunity to present our Agency Overview to the State Budget Agency. Please do not hesitate to contact me if you have any questions. Sincerely,

David W. Vice Executive Director, Integrated Public Safety Commission

¹ Short answers to these questions can be found on page 11.

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I. IPSC's Programs and Functions

"The Integrated Public Safety Commission's primary mission is to facilitate statewide public safety communications. IPSC provides an interoperable and reliable public safety communications system to first responders and public safety professionals for use during routine, emergency and task force situations. Our goal is to strengthen community safety and security by minimizing the financial and technological barriers to interoperable communications through interagency cooperation."

--IPSC Mission Statement

All IPSC programs fall under one of three functions: 1. Communications System Implementation, Operation, and Maintenance; 2. Statewide Interoperability Outreach, Training, and Coordination; or 3. Disaster Response and Communications Infrastructure Restoration.

1. Communication Systems Implementation, Operation and Maintenance

Until recently, many of IPSC's functions related to engineering, construction, operation, and maintenance of the statewide 800 MHz radio system, the microwave backbone network, the fleet of mobile and portable radios used by the Indiana State Police, and the recently-completed statewide multi-agency multi-jurisdiction interoperable Computer Aided Dispatch/Records Management System (CAD/RMS).

Voice System

Project Hoosier SAFE-T, completed in the summer of 2007, is an 800 MHz trunked voice and data communications system which provides both day-to-day and mission critical interoperability for local, state, and federal first responders and public safety officials. SAFE-T supports both analog and digital radios, providing 95% mobile and portable radio coverage statewide using 153 communications sites (see Maps & Addendum). Coverage tests confirm this contractually-guaranteed standard being met or exceeded.

The State of Indiana funded the build-out of the system backbone and subsequent maintenance and operations costs through 2019. The funding stream comes from a \$1.25 fee per certain BMV transactions, which, until July 1, 2019, are transferred from the BMV License Branch Fund to the Integrated Public Safety Commission for the building and operation of the communications infrastructure (as enacted by PL 123, Acts of 2002).

Participating agencies provide their own user equipment, including dispatch consoles, radios, and mobile radio modems and computers, which they can buy through the state quantity purchase agreement. Participation in Project Hoosier SAFE-T is voluntary, and agencies pay no access or monthly user fees. Agency supported equipment includes state owned towers, antenna systems, shelters, backup power generators, transmitters, and receivers.

Microwave System

The 56-site microwave system provides the critical backhaul needed to connect towers, provide redundancy, and extend reach. The microwave system already heavily supports connectivity in southern Indiana; a planned microwave system upgrade in the northern part of the state will boost



connectivity in those zones as well as to the statewide system master site. The microwave system is a key component in the Indiana State Police's use of the CAD/RMS system, enabling ISP GIS (mapping) and records management applications. The system also supports ISP's mobile data, IDACS, and Voice over IP phone system, among other applications. The Indiana Department of Natural Resources, Indiana Department of Homeland Security, Federal Bureau of Investigation, and National Weather Service also rely on the microwave system for varied connectivity needs.

Statewide Computer Aided Dispatch/Records Management System (CAD/RMS)

Using American Recovery & Reinvestment Act (ARRA) grant funds, IPSC implemented a statewide multi-agency multi-jurisdiction interoperable Computer Aided Dispatch/Records Management System (CAD/RMS). Initial deployment, testing, and acceptance occurred at the Indiana State Police Regional Dispatch Centers in 2011 and 2012. Sign off / acceptance will be completed September 30, 2012. The system is now available to local, county and state agencies who wish to participate.

2. Statewide Interoperability Outreach, Training and Coordination

The Integrated Public Safety Commission is statutorily charged with "promoting the efficient use of public safety agency resources through improved coordination and cooperation in order to enhance the safety of Indiana residents" (IC 5-26-2-1). This mission area is becoming even more important as IPSC transitions from a building/implementation mode to a customer service mode.

In accordance with federal guidelines and best practices, IPSC serves as the Statewide Interoperability Coordinator (SWIC). The SWIC role concentrates on tasks identified in the Statewide Communications Interoperability Plan (SCIP) and measures progress toward the plans, goals, and objectives.

The primary mission of the SWIC is to encourage teamwork and collegiality among statewide stakeholders to help them achieve national, statewide, regional, and local goals. The SWIC implements SCIP initiatives through committees (Statewide Interoperability Executive Committee) and other working groups and works directly with the State Administrative Agency (SAA - Indiana Department of Homeland Security) and other agencies involved with Grant Administration such as ICJI.

Activities and responsibilities include:

OUTREACH

- Develop and provide technical standards information to stakeholders/users
- Develop and implement statewide standard operating procedures
- Deliver training
- Coordinate/evaluate interoperable communications during exercises
- Develop and maintain resource lists
- Facilitate the statewide governance system to ensure practitioner input.
- Communicate regularly with all stakeholders to ensure transparency and to share knowledge



GRANTS MANAGEMENT

- Coordinate with IDHS to monitor the State's interoperable communications grant opportunities, review potential projects, and provide recommendation for grant requests.
- Coordinate the compilation of State investment justifications and grant applications for communications interoperability.
- Seek additional grant funding opportunities for statewide interoperable communications efforts beyond those that are administered through the IDHS/SAA structure.
- Help align locally-awarded, non-State administered, interoperable communications grant funds (e.g., association grants for local disciplines or jurisdictions) to the SCIP.

Additional SWIC activities include:

- Serve as a liaison with the federal government, bordering states, and other industry stakeholders.
- Policy Development and Measurement (including the complex and time consuming process of maintaining and implementing the SCIP and aligning it to the National Emergency Communications Plan (NECP).

3. Disaster Response and Communications Infrastructure Restoration

When disasters occur, such as the recent EF4 tornado in southern Indiana, IPSC plays a critical role both on the scene and in the state Emergency Operations Center (EOC).

ESF2 LEAD AGENCY - As directed by the state Comprehensive Emergency Management Plan (CEMP), IPSC serves as the lead agency for Emergency Support Function 2 (ESF2 – Communications). Despite its small size, IPSC has trained staff to man the ESF2 desk in the EOC on a twenty-four hours a day, seven days a week basis during activation. The primary mission of the Communications Emergency Support Function is to provide the resources and personnel to meet the overall communications-related needs of the State before, during, and after emergency or disaster events. Responsibilities include restoration and repair of communications infrastructure; protection, restoration, and sustainability of state information technology resources; and coordination of telecommunications and information technology industries.

<u>DISASTER RESPONSE (and Event Support)</u> – When events occur that cause a disruption in communications or require a coordinated communications response, IPSC is prepared to provide both staff and equipment to support the mission. IPSC maintains two Mobile IntelliRepeater Sites (MIRS), each functioning as a 5-channel IR site, equipped with a pneumatic 70 ft. extendable mast, MotoBridge, links to VHF, UHF, and MACOM/EDACS, and two programming workstations to allow technicians to quickly help responders reprogram radios. Each MIRS can be stocked with cache radios, batteries, and chargers.

Additionally, IPSC is preparing first responders to serve in emergency communications response positions by sponsoring National Management System (NIMS) Communications Unit training. To date,



nearly 150 first responders across the state have taken Communications Unit Leader (COML), Communications Unit Technician (COMT), and Auxiliary Communications (AUXCOMM) courses. To emphasize the importance of NIMS training, IPSC encourages agency staff to complete basic and advanced courses. Eleven staff members have completed the week-long COML class; twelve have completed the week-long COMT course; and twelve completed the two-day AUXCOMM (amateur radio) course.

II. Accomplishments and Challenges

Accomplishments

System Usage – The 800 MHz SAFE-T system continues to receive remarkable participation and numerous accolades. Currently, 60,000 user IDs are entered into the system database. This includes first responders from all 92 counties, representing all public safety disciplines and public service agencies. Indiana is widely regarded as a national "best practice" model for state interoperable communications systems, balancing the need for technological advancement with fiscal reality. More than 137.5 *million* "group calls" – or connections – were made between public safety professionals on the SAFE-T 800 MHz system in 2011.

CAD/RMS System Implementation - Using American Recovery & Reinvestment Act (ARRA) federal grant funds, IPSC implemented a statewide multi-agency multi-jurisdiction interoperable Computer Aided Dispatch/Records Management System (CAD/RMS). Initial deployment, testing, and acceptance occurred at the Indiana State Police Regional Dispatch centers. The system is now available to local, county, and state agencies who wish to participate.

Henryville Tornado Response - Both MIRS were deployed, set up and operating in the Henryville area, the disaster epicenter, less than three hours after the tornado hit. The MIRS allows technicians to quickly help responders reprogram radios. Additionally, the MIRS were stocked with 100 cache radios purchased with PSIC grant dollars.

System Statistics – System usage and site statistics continue to be the strongest indicator of agency performance. Total channel availability in 2011 was 99.9%. Total system availability was 99.1%. One statistic that contributes to the high performance of the system is the number of site visits to inspect building, compound, and grounds for issues. IPSC staff and contracted vendors made almost 1,200 routine site visits in 2011. These numbers do not include the site visits that were initiated by critical security and system alarms. Additionally, IPSC performs a weekly test of each generator at full load to ensure this critical resource is at peak performance.

Training & Exercises - IPSC played a major role in planning and participating in the National Level Earthquake Exercise, "Shaking Bedrock," which occurred in late May 2011. The agency also increased its partnership with the IDHS exercise division, playing a large role in the spring and fall statewide exercises at Muscatatuck Urban Training Center (MUTC). These exercises have had a dramatic impact on both local and state agencies, illustrating the communications capabilities and gaps that need to be addressed.



CASM Database – Indiana took on – and completed - the massive project of fully populating the state Communication Assets System & Mapping (CASM) database. This project is a deep, layered effort, with detailed accurate information from each of the thousands of public safety agencies – no matter how small – across the state. As a result of this project, Indiana now has what is possibly the most complete, usable database in the country.

District TICP Plans – Information pulled from the newly-populated CASM database was used to create District Technical Interoperable Communications Plans (TICPs). Each District plan follows a newly-developed state base plan/template.

Inter-State Interoperability - During 2011, Indiana continued interoperability discussions with neighboring states. In addition to active participation in the FEMA Region V RECCWG (Regional Emergency Communications Coordinating Working Group) and NCSWIC (National Council of Statewide Interoperability Coordinators), Indiana coordinated recurring meetings with several states. These discussions resulted in a Regional TICP between four, Louisville, KY-area counties and three, Indiana counties - Clark, Floyd and Harrison; a cross-border interoperable "patch" established between Ohio and Indiana; as well as similar plans for cross-border interoperability with Michigan and Illinois.

Statewide Interoperability Executive Committee (SIEC) — Working together with IDHS, IPSC adopted the Homeland Security District concept as the basis for expanding and improving regional and local interoperable communications governance and planning. The Statewide Interoperability Executive Committee (SIEC) consists of a member from each of the ten Districts, representatives from state agencies, local Public Safety Answering Point (PSAP) agencies, and non-governmental representatives.

During 2011, the SIEC continued to meet, strengthen policies and procedures, and emerge as true leaders in the interoperable communications community. This district governance structure serves as a continuous-flow conduit for plans, SOPs, and other communications issues.

4th **Annual Indiana Interoperable Communications Conference** - One of the greatest successes of the past several years continues to be the annual Indiana Interoperable Communications Conference. Three hundred public safety professionals from a myriad of disciplines, agencies, and levels of government gather for a two-day conference to focus on important communication issues. The 2011 conference offered workshops on amateur radio, district standard operating procedures (SOPs) and plans, and a keynote address from Admiral Thad Allen, Incident Commander for Hurricane Katrina and the Gulf Oil Spill.

Challenges

System limitations, growth and technology issues. IPSC's success continues to be a major contributing factor to its biggest challenge. SAFE-T, when purchased more than ten (10) years ago, was designed using the latest network architecture and server technology. The system was strategically designed to support both analog and digital voice technology, capable of operating with older 800MHz systems, as well as newer digital radio systems. Today, SAFE-T supports a significant mix of both technologies, each with its own capacity and life cycle. The current system allows a maximum of 64,000 radio IDs. A



majority, or 60,000 IDs, are configured in the SAFE-T database today, and thousands more are reserved for local agencies that have used federal grants to purchase radios. In the past two years, working with local and state agencies, IPSC has recovered over 2,500 IDs that were not being utilized. Staff will continue to work towards this effort.

The extraordinary success of the SAFE-T network, along with technology lifecycle issues, has brought Indiana to a communications crossroads.

Planning new technology implementation during an environment of serious financial difficulty and diminishing revenues is difficult, at best. That, when coupled with the many challenges we face prolonging the life of SAFE-T, pales in comparison to the effort and total costs associated with an upgrade and migration to the next generation technology. IPSC will continue to explore solutions that will address this issue.

Federal reports, requirements and mandates – The 9-11 tragedy underscored the importance of interoperable communications, pushing the issue to the top of a long list of public safety issues. The influx of federal grant dollars also brought a new era of expectations and goals. Clearly, the goals are for the good of the state and the good of the nation, but the effort of keeping up with the requirements and mandates is overwhelming for an agency as small as IPSC. For example, in addition to updating and aligning the Statewide Interoperable Communications Plan (SCIP), IPSC is responsible for meeting reporting requirements for the National Emergency Communications Plan (NECP). In particular, Goal 2 of the NECP states that by 2011, 75 percent of all jurisdictions should be able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies. The burden of gathering and documenting this information from all 92 Indiana counties and then reporting and submitting it to the federal Office of Emergency Communications (OES) fell upon IPSC staff. This was a huge task that required considerable staff time and effort. Multiple federal programs and requirements require similar effort.

Increased Services to State Agencies – In 2009, IPSC transitioned the Indiana State Police communications technical staff into the agency. This action made business sense, streamlined services, and saved taxpayer dollars. Funding for the additional staff and the services they provide comes from existing IPSC revenues. The expansion of the agency's core technology competency has led to requests from other agencies requiring radio system and equipment support. As a result, IPSC now provides radio programming and support for several state agencies, including ISP (3,154 radios), DNR (739 radios), IDHS (359 radios), and INDOT (3,096 radios). Supporting this dramatic increase is proving to be a challenge, both financially and in regard to staffing.

Need for Outreach & Training – Systems don't operate themselves – people do. Without training, all investments are for naught. Further, agencies accustomed to working alone in the past must now work together. They must respond to an event together and must communicate on scene together. More importantly, they must work together prior to the event to formulate standard operating procedures and mutual aid agreements. Then, they must train together to ensure that the coordinated response becomes habit. As simple as this sounds, the reality is that it takes enormous focus and effort. The



recent response in Henryville underscores this point – the SAFE-T system remained standing following an E4 tornado and functioned as designed. Responders' use of the system, however, revealed that a training gap still exists. Although progress has been made in recent years, IPSC has been unable to provide the outreach and training needed due to lack of staff.

Change Package #1 requests two new positions to fulfill the need for training and outreach. The addition of two staff members to attend distract and county communication meetings and provide education and training will help alleviate these training gaps. The additional staff will also support IPSC's responsibilities in the upcoming planning and development of the National Public Safety Broadband Network. The need for local education, communication and input during this major federal initiative is massive, and IPSC cannot provide adequate support and guidance without the additional staff.

Help Desk – Currently, IPSC provides help to users in several ways. Indiana's contract with Motorola provides for help desk services during non-business hours (6:30 pm to 6:30 am and weekends) to address system issues. To help accommodate after-hours radio system calls, certain members of the executive and technical staff take turns carrying a pager. As the system has grown, this solution has become unmanageable. With the addition of the CAD/RMS and the ISP microwave system, handling system calls in this manner will be impossible. CAD/RMS will require a more robust user interface since it is an information technology system. IPSC is looking into having this service provided by the IOT Help Desk. A single help desk number for all IPSC end user problems on all systems will provide a more cohesive and efficient response to our users of all the systems.

As more local agencies are added to the CAD/RMS system, the maintenance of the geographic data will continue to increase, which means it is no longer a one person system administration job. Change Package #2 addresses this need. IPSC currently has only one staff position dedicated to the CAD/RMS project/mission. Now that the CAD/RMS system has been successfully deployed, local agencies are able to join. The projected rise in numbers of users will dramatically increase IPSC's responsibilities and workload. The addition of a GIS Coordinator to the staffing table is a critical factor in the successful operation of the system. The GIS Coordinator will also support IPSC's responsibilities in the upcoming planning and development of the National Public Safety Broadband Network. The technical requirements for this major federal initiative are extensive, and IPSC cannot provide adequate support and guidance without the additional staff.

Broadband - On February 22, 2012, the President signed the *Middle Class Tax Relief and Job Creation Act of 2012*, which establishes the Nationwide Public Safety Broadband Network (NPSBN) for emergency responders at all levels of government. The signing of the Act was the culmination of over a decade of effort to see the reallocation of spectrum to public safety and to fulfill one of the 9/11 Commission recommendations: the development of a nationwide interoperable communications network. While this is good news, the amount of planning and coordination that it will take – even in the initial stages – is staggering. The Governor's Office has designated IPSC as the liaison for NGA Broadband activities and communications.



III. Agency Objectives for the Next Biennium

- Serve as a liaison, subject matter expert (SME), coordinator, or other role as designated by the Governor's Office for the planning and implementation of the National Public Safety Broadband Network
- Provide access to an interoperable communications network to all public safety agencies statewide that wish to participate by migrating to updated technology
- Provide a common understanding of communications interoperability throughout the state of Indiana
- Provide on-demand training for interoperable communications
- Coordinate local, state, and federal public safety resources; tear down agency and geographical boundaries; and foster cooperation between police, fire, EMS, and other first responder and public safety agencies

IV. Key Performance Indicators and Program Measures

1. Systems Availability

- Radio System (800 MHz) Availability
- Microwave System Availability
- CAD System Availability

2. Quarterly Radio Usage

- Recovered Radio IDs
- Requests for New Radio ID's

3. Customer Service Measures

- CAD trouble calls time to resolution
- Microwave trouble calls time to resolution



V. Agency Organization

Thirty-two staffers work to carry out IPSC goals and mission, each with targeted expertise in public safety radio systems, planning, project management, financial modeling, and public information.



VI. Programs to be eliminated, and/or replaced by other programs

IPSC will not be eliminating any programs in the next biennium. The agency, however, is transitioning from a building and implementing phase into a customer service phase. This transition will require new staff for outreach and administration.

VII. Reallocation of funds

None.



Answers to questions

Q: How resilient are the communications sites in the statewide network?

A: Despite winds that reached 175 miles per hour, none of the towers in the statewide system fell during the 2012 Tornado outbreak.

Q: How well will the system function when overloaded?

A: Once the initial communications protocols were established, the system performed as designed, offering an interoperable communications platform to responders of all disciplines and geographical areas.

Q: How quickly can the agency mobilize staff & equipment to support response and recovery?

A: IPSC staff mobilized, deployed, set up, and were operating the first Mobile IntelliRepeater Site (MIRS) in Henryville less than three hours after the tornado hit. Additionally, IPSC staff responded to the state Emergency Operations Center (EOC) to man the ESF2 desk less than an hour after activation notice.

Q: Do the interoperable communications plans and policies that are in place facilitate response?

A: To some degree, yes, but much more training and outreach is needed.

Q: Are responders sufficiently trained on system use and interoperable communications principles in general?

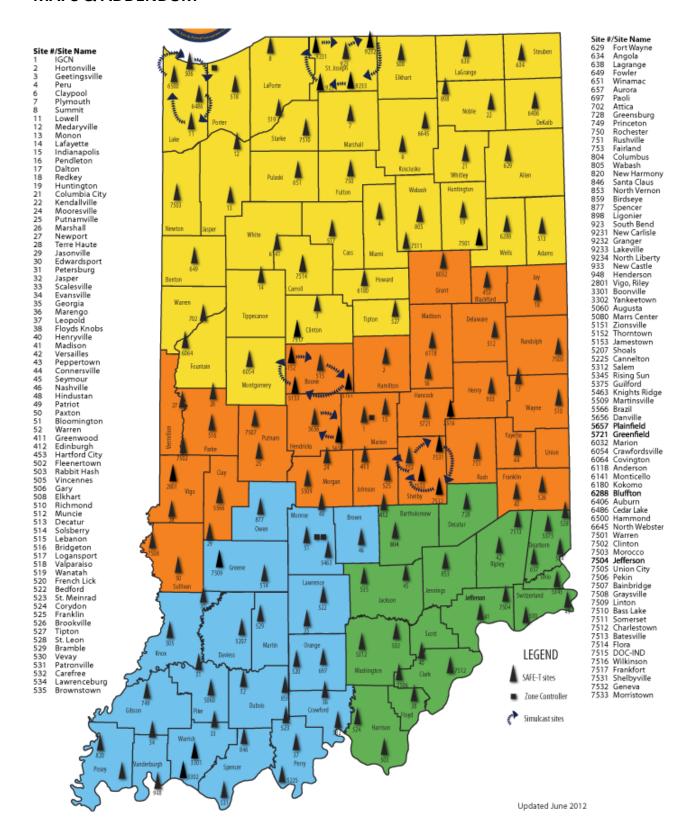
A: The short answer is no. While progress has been made, this is a gap that must be addressed.

Q: And, most of all, what do we, as an agency, need to do to ensure that first responders are even better equipped, trained and able to communicate during the next disaster?

A: IPSC has constructed and is maintaining a robust statewide interoperable voice communications system as well as a statewide CAD/RMS system available to public safety agencies statewide. The mere existence of these systems, however, is not enough. IPSC must direct agency planning and focus towards delivering "customer service" to first responders, including strategic outreach and training programs.



MAPS & ADDENDUM





Current & Planned Microwave Connectivity

